

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

1. (Previously Presented) A method for producing a white LED of predetermined color temperature, comprising:

in a plurality of LEDs that includes uncoated blue LEDs or uncoated UV LEDs, or both, the uncoated blue LEDs or uncoated UV LEDs each having a respective wavelength, the wavelength of the uncoated blue LEDs or uncoated UV LEDs not all being equal, determining a wavelength of each respective uncoated blue LED or uncoated UV LED of the plurality of LEDs;

determining a single time a respective quantity and concentration of a conversion layer to be applied over each respective uncoated blue LED or uncoated UV LED of the plurality of LEDs based on at least the wavelength determined, wherein the conversion layer includes a color conversion agent, said conversion layer configured to absorb at least one of blue light and UV light, and emit light of longer wavelength; and

coating each respective uncoated blue or UV LED individually, with the conversion layer having the respective quantity and concentration determined that single time in said step of determining the quantity and concentration, wherein the coated LED has the predetermined color temperature.

2. (Previously Presented) The method according to claim 1, wherein the color conversion agent is applied by means of at least one of a dispenser and a stamp, and

wherein at least one of a quantity of said color conversion agent and a concentration of said color conversion agent is selected depending upon the exact wavelength.

3. (Previously Presented) The method according to claim 1, wherein the color conversion agent is applied by means of inkjet printing, and wherein at least one of a quantity of said color conversion agent and a concentration of said color conversion agent is selected depending upon the exact wavelength.

4. (Previously Presented) The method according to claim 1, wherein the color conversion agent is applied by means of deposition in a gas phase, wherein at least one of a quantity of said color conversion agent and a concentration of said color conversion agent is selected depending upon the exact wavelength.

5. (Previously Presented) The method according to claim 4, wherein a mask, such as a photomask, is produced, apertures of said mask being selected depending upon the exact wavelength, said deposition of color conversion agent in gas phase being effected through said mask.

6. (Previously Presented) The method according to claim 1, wherein the color conversion agent is initially homogeneously applied and subsequently selectively removed by means of a laser in correlation with the exact wavelength.

7. (Previously Presented) A white LED light source, comprising:
a plurality of blue LEDs or UV LEDs, and, above each of said LEDs, a conversion layer, wherein the conversion layer has a thickness, above a particular one of the blue or UV LEDs, that is proportional to a determined wavelength of that particular blue or UV LED, and wherein the thickness of the conversion layer is increased for a respective longer wavelength and decreased for a respective shorter wavelength.

8. (Previously Presented) The method according to claim 1, wherein the quantity of the conversion layer to be applied over each uncoated blue LED or uncoated UV LED is determined such that a constant dispensing volume of the applied conversion layer is present on each of the plurality of LEDs.

9. (New) The method according to claim 1, wherein the conversion layer has a thickness, above a particular one of the blue or UV LEDs, that is proportional to a determined wavelength of that particular blue or UV LED, and wherein the thickness of the conversion layer is increased for a respective longer wavelength and decreased for a respective shorter wavelength.